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EXAMINER

KADING, JOSHUA A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/611,342

Applicant(s)

IKEDA, SABUROU

Examiner

Joshua Kading

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6,9-15,17,19 and 21-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,12,15,17,19,21 and 24 is/are rejected.  
7) ☒ Claim(s) 3-6, 9-11, 13, 14, 22, and 23 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 recites the limitation "said one diverging port" and "said one user terminal" in lines 13-14. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 15, 17, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,787,072, Shimojo et al. (Shimojo) in view of U.S. Patent 6,600,741 B1, Chrin et al. (Chrin).

Regarding claims 1, 15, 17, 19, and 21, Shimojo discloses "a communication system comprising: a public network switching system having a first plurality of line

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ports...a second plurality of line ports, a first plurality of trunk ports...and a second plurality of trunk ports (*figure 13, where all line ports are coming into switch 92, all trunk ports are exiting switch 92, and the user terminals are connected to the input lines as is suggested by the "data cell" entering switch 92*); a switching unit having a first plurality of diverging ports connected to said second plurality of trunk ports, a second plurality of diverging ports...and a plurality of converging ports connected to said second plurality of line ports (*figure 13, elements 96 show a switching unit having a plurality of diverging ports (inputs) connecting the trunk lines (outputs) of switch 92*); and a control unit responsive to a request signal...for establishing in said switching unit at least one first connection between one of said first plurality of diverging ports and at least one of said converging ports specified by said request signal and at least one second connection between one of said second plurality of diverging ports and said at least one of said number of said converging ports (*figure 13, elements 94 and 132 provide control information to the switching unit as can be read in col. 11, lines 40-43*), said public network switching system establishing a connection between a user terminal and said one of said first plurality of diverging ports and at least one connection between said second plurality of line ports and said first plurality of trunk ports corresponding to said at least one first connection established in said switching unit (*figure 13 where the data cell entering switch 92 at the first line port follows the darkened line path through the switching unit 96 back through switch 92 and on to be transmitted*)."

However, Shimojo lacks what Chrin discloses, "...ADSL modems..." as the user terminals (*figure 17, where element 1710 has ADSL lines interfacing with it, as such*

*there must be ADSL modems) and "...Internet lines (figure 17, where element 1720 has Internet Protocol lines interfacing with it, thus the switch ports of element 1700 are connected to Internet lines)..."*

It would have been obvious to one with ordinary skill in the art at the time of invention to include the ADSL modems and Internet lines for the purpose of expanding a user's service to not only include phone service but also Internet access. The motivation being to allow the user to have different services (voice, video, Internet, etc.) consolidated to be transportable using one technology (*Chrin, figure 17, where element 1710 shows that the line card has phone interfacing lines and ADSL lines for data*).

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimojo et al. and Chrin et al. as applied to claim 1 above, and further in view of U.S. Patent 6,049,602, Foladare et al. (Foladare).

Regarding claim 12, Shimojo lacks what Foladare discloses, "a phone number memory for storing a plurality of phone numbers (*col. 5, lines 11-14 where there are a plurality of phone numbers implied*); and a processor for determining whether a phone number contained in a request signal coincides with one of said phone numbers stored in said phone number memory and establishing said at least one connection in a switching unit if the phone number coincides with one of the stored phone numbers (*col. 6, lines 15-30 and 37-40*)."

It would have been obvious to one of ordinary skill in the art at the time of invention to include a telephone number database and processor for determining whether a phone number exists in the database for the purpose of verifying

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that a legitimate user is trying to access the system. The motivation for verifying the user is to prevent fraud and hacking (*Foladare, col. 10, lines 3-4*).

6. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimojo et al. in view of Foladare et al.

Regarding claim 24, Shimojo discloses, "a control unit for a public network switching system, the switching system having a first plurality of line ports to which a plurality of user terminals are connected, a second plurality of line ports, a first plurality of trunk ports to which a plurality of Internet lines are connected, and a second plurality of trunk ports (*figure 13, where all line ports are coming into switch 92, all trunk ports are exiting switch 92, and the user terminals are connected to the input lines as is suggested by the "data cell" entering switch 92*) and having a switching unit having a plurality of diverging ports adapted for connection to said second plurality of trunk ports and a plurality of converging ports adapted for connection to said second plurality of line ports (*figure 13, elements 96 show a switching unit having a plurality of diverging ports (inputs) connecting the trunk lines (outputs) of switch 92*), the control unit comprising: wherein the public network switching system establishes a connection between said one diverging port and said one user terminal and at least one connection between said second plurality of line ports and said first plurality of trunk ports corresponding in number to said at least one connection established in said switching unit (*figure 13 where the data cell entering switch 92 at the first line port follows the darkened line path through the switching unit 96 back through switch 92 and on to be transmitted*)."

However, Shimojo lacks what Foladare discloses, "a phone number memory for storing a plurality of phone numbers (*col. 5, lines 11-14 where there are a plurality of phone numbers implied*); and a processor for determining whether a phone number contained in a request signal coincides with one of said phone numbers stored in said phone number memory and establishing at least one connection in a switching unit if the phone number coincides with one of the stored phone numbers (*col. 6, lines 15-30 and 37-40*)."

It would have been obvious to one of ordinary skill in the art at the time of invention to include a telephone number database and processor for determining whether a phone number exists in the database for the purpose of verifying that a legitimate user is trying to access the system. The motivation for verifying the user is to prevent fraud and hacking (*Foladare, col. 10, lines 3-4*).

#### ***Allowable Subject Matter***

7. Claims 3-6, 9-11, 13, 14, 22, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

8. Applicant's arguments, see REMARKS, page 12, section II, filed 12 April 2004, with respect to the 35 U.S.C. 112, second paragraph rejections of claims 11-14 have

been fully considered and are persuasive. The 35 U.S.C. 112, second paragraph rejections of claims 11-14 have been withdrawn.

9. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Further, although applicant points to the fact that Shimojo and Chrin are directed towards solving different problems (different from each other and from the instant application), this does not preclude the combination of references. See MPEP § 2144.

10. Applicant's arguments filed 12 April 2004 have been fully considered but they are not persuasive.

Page 14 of applicant's REMARKS, applicant asserts that Shimojo does not disclose, "a switching unit...a public network switching system... a public network switching system...and the number of connections...corresponding to the number of connections established in the switching unit." Applicant further asserts that Shimojo lacks the diverging ports because the ports of Shimojo do not diverge as is required by the diverging ports of the instant application. The examiner respectfully disagrees.



Shimojo discloses "a switching unit" as seen in figures 13 and 14. This switching unit having a plurality of diverging ports, i.e. inputs into the control unit from the switch. Support for this definition of diverging ports is found in applicant's figure 1, inputs D1-DM. And Shimojo's switch node 92 acts (as stated in the rejection) to establish connections between the various line ports and trunk ports. It is never stated that switch node 92 is a public network switching system as applicant states. Lastly, the number of connections setup between the line ports and the trunk ports is the same as in the switching unit, i.e. in Shimojo there is one connection setup between a line port and a trunk port, the same as in the switching unit.

Lastly, applicant's claims say nothing about what a "diverging port" is other than it is a port. Further, applicant's own specification does not seem to define "diverging ports" the way applicant has argued. See page 6, lines 2-3, 5-7, and 15-17 of the specification as well as figure 1, where it shows the diverging ports acting as input ports to the control unit from the switching unit. There is nothing in the specification that **specifically** defines that the diverging ports "must diverge." In fact it appears that applicant defines the diverging ports as ports. It is true that applicant can act as his own lexicographer. However, if this is the case, applicant must clearly and specifically define his own terms in the specification. See MPEP 2106.II.(C). This is not done here and therefore reading additional limitations from the specification or arguments into the term "diverging ports" of the claims would be inappropriate.

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11. Applicant's arguments, see REMARKS, page 16 regarding DeNap's disclosure of Internet lines, filed 12 April 2004, with respect to the rejection(s) of claim(s) 1, 3-6, 15, 17, 19, and 21 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art that more accurately reads on applicant's claimed invention.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Art Unit 2661